Remarks

Claims 1, 3-13, 15-20, 22-44, 46-48, 50, 51, 53, 56, 58, and 59 are pending in the above-identified patent application.

Applicant respectfully requests reconsideration and further examination of the application in view of the amendments above and remarks below.

Claim Rejections Under 35 U.S.C. §103

Claims 1, 3-13, 15-20, 22-44, 46-48, 50, 51, 53, 56, 58, and 59 stand rejected in the outstanding Office Action under 35 U.S.C. §103(a) as being unpatentable over Narayanaswamy et al. (6,261,613) in view of Gulstad et al. (U.S. Pat. No. 3,767,421).

Applicants respectfully submit that the Examiner has failed to present a *prima facie* case of obviousness with respect to any of the independent claims and therefore, the rejection under 35 U.S.C. §103(a) cannot be sustained.

The Invention

The present invention is directed to refrigerated dough products and to methods of producing a cooked dough product from a refrigerated dough product. Six embodiments of the invention are claimed. Three of these embodiments (independent claims 1, 27, and 29) are directed to the refrigerated dough product and three (independent claims 35, 53, and 58) are directed to the method of producing the cooked dough product.

Each of these embodiments require the presence of an encapsulated basic active ingredient that has an activity in the range of from about 55 percent to about 70 percent. Activity is defined in the specification as the relative amount by weight of active ingredient (i.e., the basic ingredient) to the total encapsulated particle weight. See page 22, lines 16-18 of the specification.

Each of the independent claims contains other limitations. They differ form one another as follows.

Independent claim 1 further specifies that the dough composition (a) experience less than 35 percent expansion during a time period beginning upon completion of the dough composition preparation and continuing through packaging and refrigerated storage, (b) have a

raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram, and (c) when baked, have a baked specific volume of at least about 2.5 cubic centimeters per gram.

Independent claim 27 further specifies that the dough composition (a) be refrigeration stable such that no more than 0.46 cubic centimeters of carbon dioxide is released from the dough composition per gram of dough composition over a twelve week period of storage at about 45°F, (b) that when stored at refrigerator conditions for a time-period of at least 12 weeks, it has a raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram, and (c) when baked, it has a baked specific volume of at least about 2.5 cubic centimeters per gram.

Independent claim 29 further specifies that the dough composition be provided in a package. Independent claims 35 specifies that the dough experience less than 35 percent expansion during a time period beginning immediately after the ingredients are combined and continuing through each of the specified packaging and the refrigerating steps.

Independent claim 53 further specifies that the dough composition be packaged in a non-pressurized container. It does not require that the dough experience less than 35 percent expansion during a time period beginning immediately after the ingredients are combined and continuing through each of the specified packaging and the refrigerating steps.

Independent claim 58 further specifies that the dough composition be refrigeration stable such that no more than 0.46 cubic centimeters of carbon dioxide is released from the dough composition per gram of dough composition over a twelve week period of storage at about 45°F. Like claim 53, it does not require that the dough experience less than 35 percent expansion during a time period beginning immediately after the ingredients are combined and continuing through each of the specified packaging and the refrigerating steps.

The Examiner's Reasoning

The Examiner has argued that Narayanaswamy discloses some, but not all, of the elements of Applicant's claims. The Examiner specifically acknowledges Narayanaswamy does not disclose the activity of the encapsulated agent, the raw specific volume, an acid leavening agent selected to have a low solubility, the type of barrier material claimed, the baking temperature as claimed, or encapsulating using a fluidized bed.

The Examiner has further argued that Gulstad discloses dough that uses encapsulated basic and acidic ingredients, the use of leavening agents, which are only nominally active at room temperature or by protecting the agents, and acidic ingredients that are only nominally active at room temperature.

The Examiner concludes that it would be obvious to choose the acidic ingredients among the materials disclosed by Gulstad to "be nominally active below the baking temperature to ensure the delay of the chemical reaction. The Examiner then states that it would be inherent that the dough would possess a similar degree of expansion, activity, stability and carbon dioxide release as claimed.

Applicant's Arguments in Opposition to the Rejection

The Court of Appeals for the Federal Circuit has explained that the "motivation-suggestion-teaching" requirement to establish a *prima facie* case of obviousness "protects against the entry of hindsight into the obviousness analysis...." (See *In re Kahn*, 04-1616, *12 (Fed. Cir. 2006)). The "motivation-suggestion-teaching" test:

> [A]sks not merely what the references disclose, but whether a person of ordinary skill in the art, possessed with the understandings an knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims... From this it may be determined whether the overall disclosures, teachings, and suggestions of the prior art, and the level of skill in the art –i.e., the understandings and knowledge of persons having ordinary skill in the art at the time of the invention – support the legal conclusion of obviousness. (See *In re Kahn*, 04-1616, *16 (Fed. Cir. 2006)) (citations omitted).

As discussed above, the independent claims each require, *inter alia*, that the dough composition contain an encapsulated basic active ingredient that has an activity in the range of from about 55 percent to about 70 percent. Narayanaswamy does not disclose this feature. In fact, Narayanaswamy teaches that the dough product is fine without any further modification. Thus not only does Narayanaswamy fail to recognize that the activity of the basic active ingredient has any importance at all, he provides no motive to make any changes to his composition.

Gulstad fails to cure this fundamental deficiency of Narayanaswamy. That is, Gulstad fails to teach Narayanaswamy can or should be modified to employ an encapsulated

base that has an activity in the range of from about 55 percent to 70 percent. Gulstad first describes that leavening can be delayed until cooking by either using both acidic and basic ingredients that are nominally active at room temperature (i.e., both non-encapsulated acid and base) or by encapsulating both the acidic and basic ingredients (see Gulstad at col. 3, line 54 to col. 4, line 26, especially col. 3, lines 57-62). Gulstad does go on to briefly mention that "[t]he acidifier and carbonate or bicarbonate salt can be encapsulated together or individually or only the carbonate salt or only the acidifier can be encapsulated." (See Gulstad at col. 4, lines 26-29).

However, Gulstad does not disclose using an encapsulated base having an activity in the range of from about 55 percent to about 70 percent in combination with a non-encapsulated acid having the low solubility according to the independent claims.

In addition, Gulstad does not motivate or suggest modifying Narayanaswamy by specifically using an encapsulated base having an activity in the range of from about 55 percent to about 70 percent. As mentioned above, Gulstad. first describes that leavening can be delayed until cooking by either of two techniques, neither of which are what is claimed by Applicants. Whichever method of Gulstad is used, it is notable that Gulstad provides no reason why one should limit the activity of the basic ingredient to a range of from about 55 percent to about 70 percent. Therefore, Gulstad does not motivate one to make the changes that must be made to Narayanaswamy to result in the present invention.

Accordingly, one of skill in the art would not have been motivated to modify Narayanaswamy with Gulstad to specifically use the encapsulated base that has an activity in the range of from about 55 percent to about 70 percent and non-encapsulated acid according to the independent claims.

Finally, it is noted that the Examiner has stated in the Office Action at page 3:

> "The leavening basic ingredient in Narayanaswamy et al is encapsulated and the barrier material has a melting point within the range claimed; thus it is inherent that **dough** will possess similar degree of expansion, **activity**, stability and carbon dioxide release as claimed, it is obvious the dough exhibits the same stability as claimed." (Emphasis added.)

Without accepting the validity of the Examiner's arguments with regard to the other features included in this statement, Applicant points out that the activity of the dough is not a

part of any claim. To the contrary, it is the activity of one component, the encapsulated basic ingredient that is a part of the independent claims. This feature of the present invention is neither suggested by, nor inherent in, either Narayanaswamy or Gulstad.

Conclusion

In view of the above and remarks, it is respectfully submitted that the above-identified application is now in condition for allowance. The Examiner is invited to contact the undersigned, at the Examiner's convenience, should the Examiner have any questions regarding this communication or the present patent application.

Respectfully Submitted,

Dated: September 14, 2006

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